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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,632	09/22/1999	RANDALL L. SCHLESINGER	1999P82176US	4918

7590

02/23/2004

Siemens Corporation
Intellectual Property Department
186 Wood Avenue South
Iselin, NJ 08830

EXAMINER

WILLIAMS, CATHERINE SERKE

ART UNIT	PAPER NUMBER
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3763

DATE MAILED: 02/23/2004

24

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/401,632

Applicant(s)

SCHLESINGER ET AL.

Examiner

Catherine S. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 15-17, 19-26, 28-36, 44 and 48 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-9 and 24-36 is/are allowed.
- 6) ☒ Claim(s) 15-17, 19-22, 44 and 48 is/are rejected.
- 7) ☒ Claim(s) 23 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 15-17,19, 22 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Gruner (US Pat# 5,634,466).

Gruner discloses a medical diagnostic ultrasound catheter including a shaft (see fig 1), an ultrasound transducer (30), a lens (106), and a dielectric solid film (114). See figures 7a-7b. The film is positioned between the window and the ultrasound transducer. The film comprises a thin tape-like material of Mylar sheet. As shown in figure 7b, the film 114 is adjacent an emitting surface of the transducer and wraps around a portion of the circumference and at least one end of the transducer.

Claims 15-17,19-20 and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunham (US Pat# 5,762,067).

Dunham discloses an ultrasound endoscopic probe that includes a shaft (see fig 1), an ultrasound transducer (130), a lens (160), and a dielectric solid film (164). See figure 10. Mylar membrane 164 is 0.1 mils thick. As shown in figure 10, the film 114 is adjacent an emitting surface of the transducer.

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Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-17, 19, 22 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hossack et al (US Pat# 5,971,925).

Hossack discloses an ultrasound transducer (42), a lens (48), and a dielectric solid film (18). See figure 5. The film is positioned between the lens and the ultrasound transducer. The film comprises a thin tape-like material of Mylar sheet. As shown in figure 10, the film 18 is adjacent an emitting surface of the transducer.

Hossack meets the claim limitations as described above but fails to include a shaft. However, both Gruner and Dunham (above) teach medical device shafts containing ultrasound transducers.

At the time of the invention, it would have been obvious place the entirety of the transducer complex of Hossack into a shaft as taught by Dunham or Gruner. All three devices are analogous in the art and therefore a combination is proper. Additionally, the motivation for the incorporation would have been in order to enable the method and function of the device as disclosed to image structures within the body (see summary: Hossack).

Allowable Subject Matter

Claims 1-9 and 24-36 are allowed.

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Claim 23 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 12/3/03 have been fully considered but they are not persuasive. Applicant argues that the prior art above does not disclose catheter shafts but instead disclose probes, and since they are described as probes, the structures do not anticipate the catheter shaft. However, the probes of the prior art (i) have the same structure as the catheter shaft both as claimed and disclosed and (ii) meet the general common meaning of a catheter shaft and are designed for the same function as the instant invention.

The prior art probe and the catheter shaft of the instant invention share the same structure; and therefore, the probe anticipates the catheter shaft. The elements of the prior art and the instant invention must be arranged as required by the claim, but this is not an ipsissimis verbis test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990). While the prior art do not use the same descriptive term as the instant invention to describe the shaft, the probes are described and depicted as elongate shafts (see figures of prior art) and are identical to the structure disclosed in applicant's specification and drawings. Therefore, the prior art shafts, even though referenced as probes, read on the limitation of a catheter shaft.

Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the

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field of the invention.” *Multiform Desiccants Inc. v. Medzam Ltd.*, 133 F.3d 1473, 1477, 45 USPQ2d 1429, 1432 (Fed. Cir. 1998). If an applicant does not define a term in the specification, that term will be given its “common meaning.” *Paulsen*, at 30 F. 3d 1480, 31 USPQ2d at 1674. Applicant’s specification contains no definition for catheter shaft. Therefore, one skilled in the art must look to the common meaning to ascertain the meets and bounds of the claim terminology. According to Dorland’s Medical Dictionary, 28th ed, a catheter, generally, is “a tubular, flexible surgical instrument that is inserted into a cavity of the body...” (Note: Dorland’s continues to further define differences between catheter types (i.e. urinary, angioplasty, etc) but those specific definitions are not relevant to this application.) Clearly, the prior art figures show a tubular, flexible surgical instrument. Furthermore, both disclosures recite the function of the probe is for insertion into a patient’s body. Hence, the probes of the prior art fall under the common meaning of and anticipate a catheter shaft.

The prior art probe has the same structure as the instant invention and conforms to the generally accepted meaning of the claimed invention. Clearly, the prior art probes anticipate the claimed catheter shaft.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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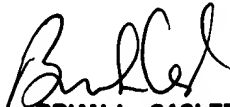
the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Catherine S. Williams whose telephone number is 703-308-4846. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 703-308-3552. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2192.

Catherine Serke Williams *CSW.*
February 19, 2004


BRIAN L. CASLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700